Amendments to the Specification

Please amend the specification as shown below in marked form.

At page 1, lines 6-12:

Cross Reference to Related Applications

This is a continuation of U.S. Application No. 08/741,609, filed October 31, 1996~~,~~ ~~pending~~ and now abandoned, which is a continuation-in-part of U.S. Application No. 08/418,602, filed April 7, 1995 and now abandoned, which is a division and continuation-in-part of U.S. Application No. 08/131,328, filed October 4, 1993 and issued as U.S. Patent 5,440,446 (Shaw et al. '446). It is also related to U.S. Patent Application No. 08/228,579 filed April 15, 1994~~, now~~ and now abandoned, U.S. Patent Application No. 08/599,596 filed February 8, 1996 and now issued as U.S. Patent No. 5,725,909 (Shaw et al. '909), U.S. Patent Application No. 08/706,180 filed August 30, 1996 and now issued as U.S. Patent No. 6,231,939, and U.S. Patent Application No. 09/745,083 filed December 20, 2000 and now issued as U.S. Patent No. 6,420,003 (Shaw et al. '003). The subject matter of the prior applications is hereby incorporated by reference.

At page 2, lines 12-19:

There is provided in practice of this invention a sheet material with low oxygen permeability comprising a polymer sheet substrate coated with a cross-linked acrylate layer and a barrier layer of metal or oxide. The acrylate layer is a cross-linked polymerization product of an acrylate monomer or oligomer having an average molecular weight per acrylate group in the range of from 150 to 600. Preferably, there is another cross-linked acrylate layer over the ~~metal~~ barrier layer. Modifying the surface of the dielectric sheet for increasing its surface energy, preferably by reactive plasma treatment, enhances adhesion and curing or polymerization of the film by an electron beam or ultraviolet radiation. Chilling the substrate enhances deposition efficiency.

At page 5, lines 3-13:

Exemplary acrylate resins employed ~~from~~ for making the dielectric layer are monomers or oligomers having an average molecular weight in the range of from 150 to 600. Preferably, the monomers have an average molecular weight in the range of from 250 to 500. Higher molecular weight fluorinated acrylates or methacrylates may be equivalent to these lower molecular weight materials and also be used for forming a deposited acrylate layer. For example, a fluorinated acrylate with a molecular weight of about 2000 evaporates and condenses similar to a non-fluorinated acrylate having a molecular weight in the order of 300. The acceptable range of molecular weights for fluorinated acrylates is about 400 to 3000. Fluorinated acrylates include monoacrylates, diacrylates, and methacrylates. Fluorinated acrylates are fast cure. Whereas methacrylates are generally too slow curing to be desirable, the fluorinated acrylates cure rapidly. Chlorinated acrylates may also be useful.

At page 13, lines 3-11:

It may also be desirable to lift the sheet off the principal deposition drum after depositing metal and pass the front surface of the sheet over a chilled roller for cooling the metallized surface. Vacuum deposition of aluminum on the surface heats the sheet and it is found that additional cooling after deposition enhances deposition efficiency and makes improved coatings. This may not be a suitable technique for coating a barrier ~~sheets~~ sheet since contact of the unprotected metal coating with a roller can cause sufficient microscopic damage to the surface that the barrier properties are degraded. Preferably, the metallized surface is coated with an acrylate which is cross-linked before the coated surface of the sheet contacts any solid surfaces.

At page 22, lines 4-19:

It has been found important to adequately protect the ~~metallized film~~ film from mechanical damage to maintain low oxygen permeability. A topcoat of crosslinked acrylate applied over the ~~metal film~~ film provides protection. If one contacts the metallized surface of a substrate against a roller in the vacuum system, inspections shows that a large number of microscopic areas have the metal film disrupted. These pinholes are large sources of leakage

through the film. On the other hand, applying a topcoat of crosslinked acrylate to protect the metal permits the sheet to be handled without special precautions to avoid contact with solid surfaces.

One may also provide protection to the ~~metallized~~ film before it contacts any solid surface by roll coating or the like with a wet roller. ~~The~~ For example, oligomers applied by roll coating are crosslinked by electron beam irradiation. Another technique is to laminate another sheet over the ~~metallized film. A~~ film. For example, a thin sheet of protective plastic has an adhesive applied and is brought into contact with the metal in a typical laminating process. Alternatively, one may use a hot melt technique where a thin sheet of polyethylene, for example, has a surface melted and brought into contact with the metal film before the surface solidifies, so that the sheet adheres to the metal.

At page 22, line 25 through page 23, line 3:

A substantial improvement in oxygen permeability is believed to be attributable to formation of a liquid film of monomer on the surface of the polypropylene, followed by cross linking of the polyfunctional acrylate. Applying the layer by condensing from the vapor phase assures smooth and uniform coating of the substrate, thereby forming an excellent surface for receipt of the ~~metallization~~ metal or oxide barrier material. Cross linking upon curing the acrylate produces a material having low inherent oxygen permeability. Adding a second layer of acrylate monomer which is polymerized in situ is believed to rectify any defects in the underlying layers and provide an additional thickness of material with inherently low oxygen permeability.